

Percy method consists in the application of long-continued low heat in the treatment of otherwise inoperable carcinoma of the uterus. This procedure is based upon a principle claimed by Percy, namely, that carcinoma cells are killed by low penetrating heat insufficient to destroy normal tissues. The Percy method has been widely adopted and the results so far reported have been almost uniformly favorable. He summarizes his observations and full reports of two fatal cases treated in the Gynecological Clinic of the Johns Hopkins Hospital. The primary effect of the Percy cautery is to cause a necrotic mass extending more or less uniformly in all directions from the coagulating point. A mass of sloughing coagulated tissue of this type offers an ideal medium for the growth of microorganisms. It will probably be found impossible to prevent infection of this area, and once infected the thrombosed vessels of the region may offer a ready entrance into the system. Therefore the danger of a septicemia is considerable. The authors are convinced, from their short experience with Dr. Percy's method, that fatalities must have been frequent wherever this method has been employed extensively, yet they were able to find only one complete report of a fatal case in the literature, that of Dr. Boldt. They conclude that the prolonged treatment of large carcinomatous masses by low heat may result in a rapidly fatal outcome with lesions similar to those in cases of fatal cutaneous burns. The necrotic mass produced by the cautery forms a particularly favorable medium for bacterial growth. The organisms may spread to the surrounding tissues or reach the general circulation through the local thrombosed vessels. It seems probable that the greatest danger in the application of the Percy cautery is a local infection and a subsequent general sepsis. Finally, the technic is ineffectual in eradicating the carcinoma. There is no evidence from these two cases that carcinoma is more susceptible to heat than is normal tissue.

Observations on Gas-bacillus Infection in France. — JUDD (*Surg., Gynec. and Obst.*, 1917, xxv, 113) says that of all the classes of wounded seen in the present European war the most terrible and formidable are those of the so-called gas-bacillus infection. Modern trench warfare with the accompanying difficulties in providing cleanliness exposes a large proportion of wounded to the dangers of gas-bacillus infection. The majority of cases follow shell wounds when a piece of contaminated clothing is carried into the depths of the wound by the projectile. Among the varieties of microorganisms present in the wounds, the bacilli *perfringens* are generally accepted as the causative organisms. These bacilli appear in the wound from the ninth to the twelfth hour. The aerobic bacteria appear about the forty-eighth hour. The symptoms of the infection appear early, usually on the second day. The parts of the body most often affected are the legs on account of the likelihood of their becoming contaminated by dirt and fecal matter. It is of vital importance that the diagnosis be made early. Pain, swelling and tension of the wound with rapidity of the pulse are important early symptoms. Vesicles, discoloration of the skin, gas formation and odor should be considered later symptoms. The prognosis depends on whether the patient receives proper early treatment. Trench hygiene and personal cleanliness are vital prophylactic measures.

Early incision of the wound with removal of the foreign bodies, cleansing of the wound and excision of damaged tissue doomed to slough are the correct surgical procedure of prevention. When the infection is once established, well placed, deep incisions exposing the deeper tissues to the air, are indispensable. For the clinical treatment of the wound, Dakin's solution has given the best results. Amputation must be resorted to in many cases and should not be delayed beyond the proper period.

Intrapericardial Traumatic Hemorrhage.—RHODES (*Ann. Surg.*, lxvi, 1917, 44) says that in general very few traumatic lesions of the thorax demand operative relief. But there is a definite type of thoracic injury in which interference must be prompt, and no considerations such as the critical condition of the patient must interfere with such operative attack. This refers to acute hemorrhage of large amount into the pericardial sac, accompanied by very slight opportunity for the free outlet of the hemorrhage. Rhodes operated on 2 cases. The first was a stab wound of the pericardium with intrapericardial hemorrhage. A rectangular osteoplastic flap was made in the following manner: An incision was made over the middle of the sternum, extending from the second to the fifth costal cartilages. From the upper and lower ends of this, incisions were made at right angles to it for a distance of five inches. This skin and muscle flap was dissected back and the cartilages of the third and fifth ribs were divided subperichondrically. The fourth was already divided by the injury. The intercostal spaces were then divided and the whole osteoplastic flap bent backward, breaking the ribs, probably at the junction of the cartilage and rib. The internal mammary artery was ligated. This gave splendid access to the anterior mediastinum. The triangularis sterni was incised and pushed aside, the pleura was seen to lie very close to the left sternal margin, and the rent was seen where the knife had penetrated. When the pericardium was opened a tremendous gush of blood came out, apparently under tension. No stab wound of the heart was found, the source of the hemorrhage being found to be a large pericardial vessel. This was ligated and the field remained dry. The wound was closed without drainage, the pericardial sac being previously washed out with salt solution. He left the hospital nineteen days after admission with a perfect cosmetic result. Heart and lung action was normal. The second case was one of stab wound of the pericardium and right ventricle intrapericardial hemorrhage; and unsuccessful attempt at heart suture. He concludes that in practically all cases of stab wound of the heart an accompanying injury of the pleura occurs, usually, resulting in a pneumothorax. Extreme symptoms of respiratory embarrassment should be considered as caused by the heart tamponade, and not by the pneumothorax alone. The tamponade must be relieved at once. These cases stand ether anesthesia well. The incision used in these cases gives splendid access to the heart and gives perfect functional and cosmetic results. Drainage is not necessary, but the sac should be washed out before closing, preferably with salt solution.